SEA®
Sistemi Elettronici
di Apertura Porte e Cancelli
International registered trademark n. 804888

CE

Italiano

English

DISSUASORE MOBILE A SCOMPARSA
BULL ANTITERRORISMO

BULL ANTI-TERRORISM
MOBILE RETRACTABLE BOLLARD

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BULL ANTI-TERRORISM

Mobile retractable bollard

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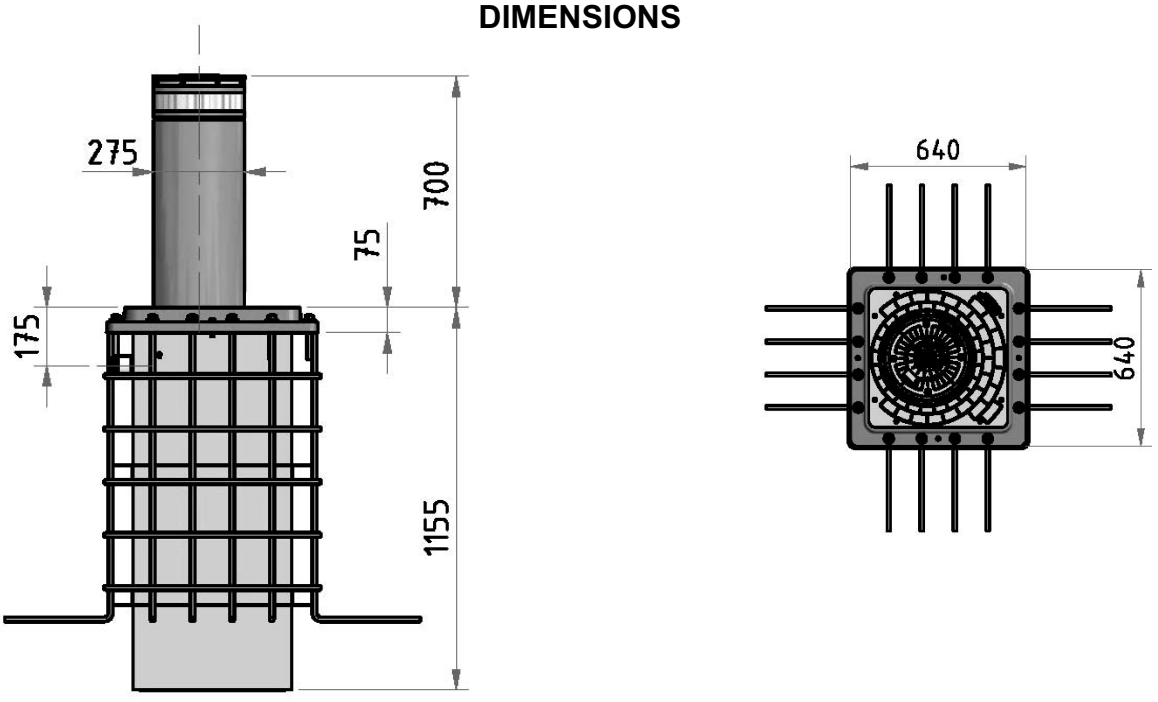
MAIN TECHNICAL CHARACTERISTICS	
MOVING CYLINDER	**FE 510 STEEL**
MOVING CYLINDER DIAMETER	**275 mm**
MOVING CYLINDER HEIGHT	**700 mm**
MOVING CYLINDER FE 510 STEEL THICKNESS	**10 mm**
MOVING CYLINDER FE 510 STEEL FINISH	**POLYESTER POWDER PAINT STANDARD GREY ANTHRACITE**
OTHER MOVING CYLINDER FINISH	**RIBS ON CYLINDERS SURFACE 304 AISI STAINLESS STEEL BRUSHED COVERING 1,5 mm**
RISING SPEED	**10 cm/sec.**
LOWERING SPEED	**20 cm/sec.**
MANUAL EMERGENCY LOWERING	**YES (VERSION WITH RELEASE NO 220 = AUTOMATIC LOWERING)**
INVERSION SAFETY PRESSURE SWITCH	**YES**
CONNECTION PIPE TO CONTROL UNIT	**STANDARD 10 mt (MAX:80 mt IF WITH HEATING MAX 50mt)**
HYDRAULIC PUMP	**BUILT-IN THE BULL**
GRADE OF PROTECTION	**IP 67**
TYPE OF USE	**INTENSIVE LIFE AVERAGE 2000000 MOVEMENTS 2000 MOVEMENTS/DAY**
IMPACT RESISTANCE (WITHOUT DEFORMATION)	**60.000 J.**
BREAKOUT RESISTANCE	**700.000 J.**
OPERATING TEMPERATURE	**-40°C + 60°C (FOR LOW TEMPERATURES SEE THE HEATING)**
WEIGHT (WITHOUT PIT)	**180 Kg**
WEIGHT STANDARD PIT WITH COUNTERFRAME AND BRACKETS	**150 Kg**

DIMENSIONS



AUTOMATIC BULL INSTALLATION SEQUENCIES

1) Perform tracing for laying the SEA bollards, checking for underground utilities in the area of excavation.

2) Dig a hole (using a miniature excavator or manually) down to 1,40 m in depth approx. A sector side shall be 1,40 m approx; in the case of laying more BULL bollards in line, you should first make a trench (as an alternative to individual excavations for each bollard).

3) Ensure that the ground features a good water absorption (try by introducing about 40 litres of water and rate that the drain takes place in less than 30 minutes); otherwise, drain rain water through a pipe that is at least 60 mm in diameter connected to the sewer or, as an alternative, connected to a pit (equipped with an electric pump) which has to be deeper than the hole that collects and drains rain water.

4) Introduce gravel (grain 8 to 20 mm. in diameter approx.) until a thickness of **25 cm** approx. is reached, taking care to compress it well to avoid eventual “settling shrinkages”.

5) Pre-assemble the SEA metallic pit with the supplied accessories as shown on page 25 of this manual (-1 cast iron subframe - 16 vertical steel bolts Ø 14 with FeB44K type, improved adherence with on the head welded of high-tensile steel threaded portions (grade 8.8 M14) - 5 horizontal square brackets to be fixed equistant to the anchor bolts using the classic armature metal wire - 16 bolts to fix the SEA bollard to the subframe which we recommend to temporarily screw to prevent that concrete residuals will obstruct the threaded holes - 1 plastic connection for flexible pipe).

6) Lay the metallic pit into the excavation and check the correct placement of the arrows indicating the direction of movement placed inside the subframe (see Fig.1 section b), making sure it is level (plumb), considering that the upper level of the subframe must be about 10mm higher with respect to the tread surface (to limit the entry of rainwater in the pit). In case of laying more SEA bollards in line and therefore realizing the excavation with trench, it is recommended to tie all pits together using linear brackets (5 on each side) Ø 16mm, laid parallel to the trench and fixed to the square brackets of the pits through the classic metal wire. **Still enter gravel for about 10 cm (indicatively leaving about 10 cm below the level of the horizontal section of the bolts) in order to prevent that the concrete case can position under the pit, blocking the drainage holes.**

7) With operating metal pit(s) and prior to concreting, lay for each pit a flexible hose (Ø 50mm outside) starting from the special plastic connection inside the pit to the motion control station for the connecting line of the SEA bollard (**see Fig.1 section b).**

8) Cast concrete minimum Rck = 25 N/mm2, **possibly with fire truck**, all around the pit up to a height of about 7 cm from the tread surface (the hight has to be determined depending on the type of finish of the road surface) and vibrate the concrete cast with the specific tool (it is recommended to lay the concrete in two phases to avoid the floating of the pit(s)).

9) Lay all the other hoses linking the control unit to the different parts of the system (ex. traffic lights, inductive loop etc…), arrange for electrical connection, earthing and other commands if needed.

10) With cured concrete (after about 1 week), perform the finishing of the road surface.

11) Install the bollard in the pit with the proper locking bolts, having previously set the connection line in the above mentioned hose.

Note: All hoses must be set in full compliance with the regulations in force.

INSTALLATION PLAN WITH THE METALLIC PIT

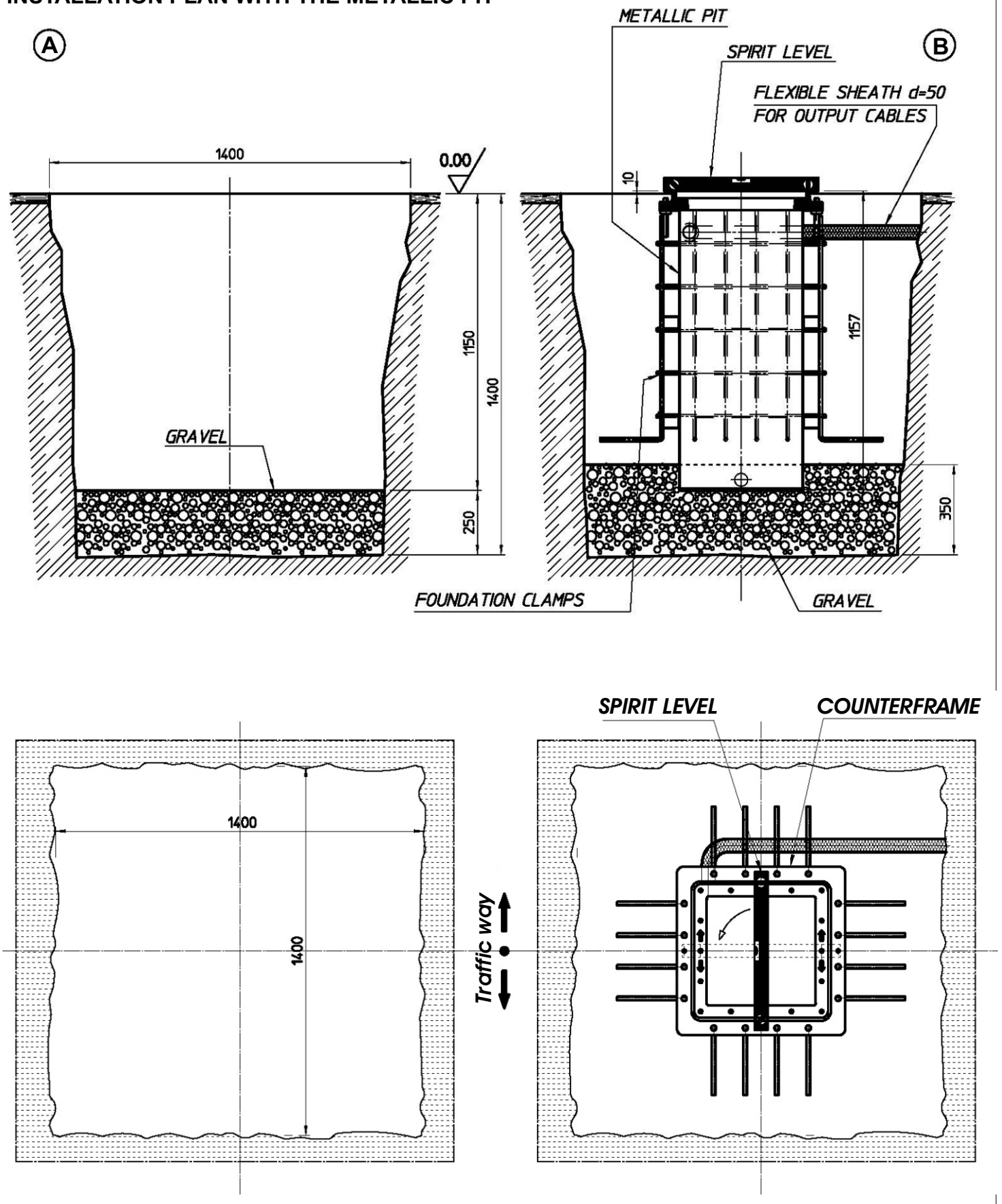


Fig.1

INSTALLATION PLAN WITH THE METALLIC PIT

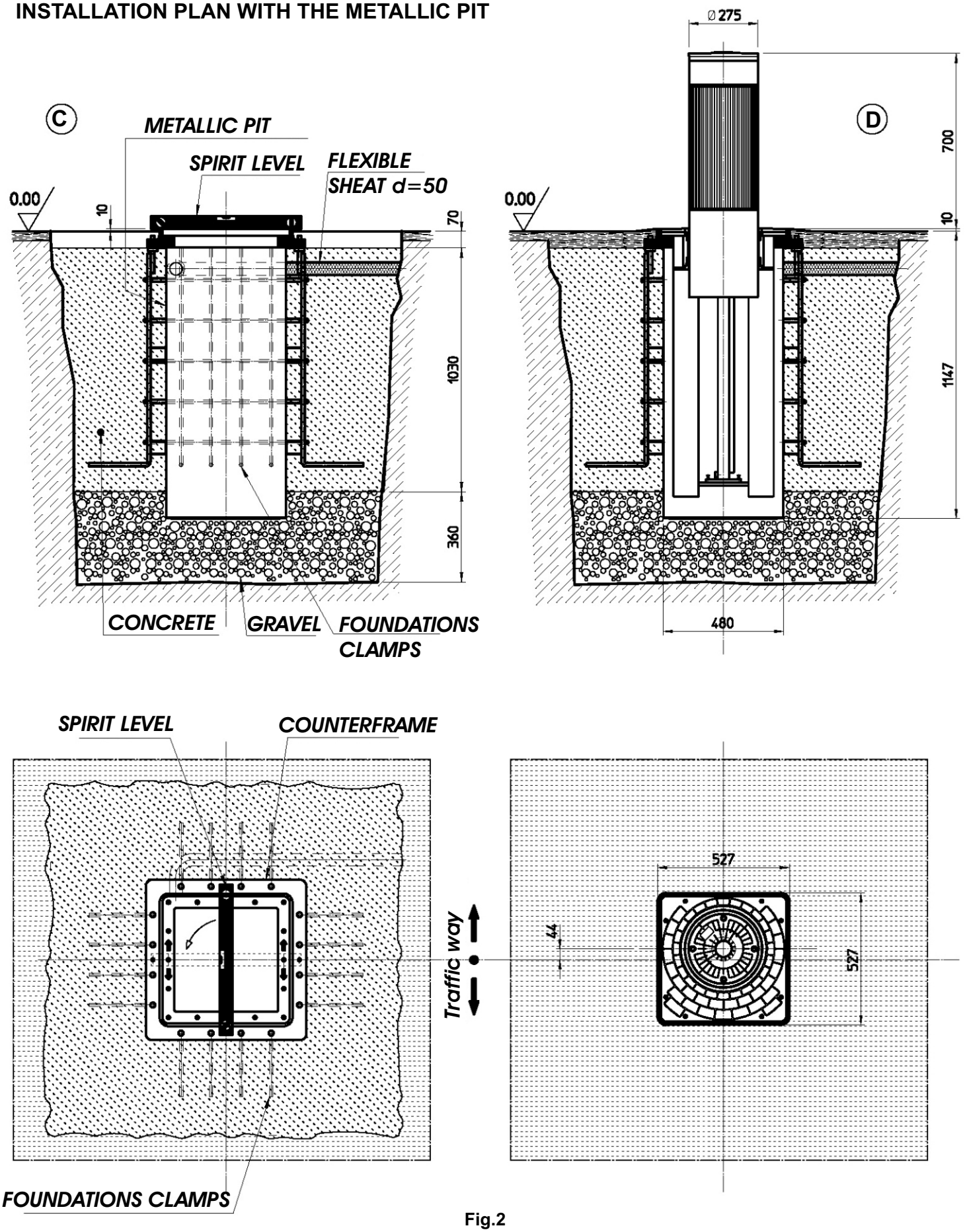


Fig.2

INSTALLATION PLAN FOR 3 BOLLARDS

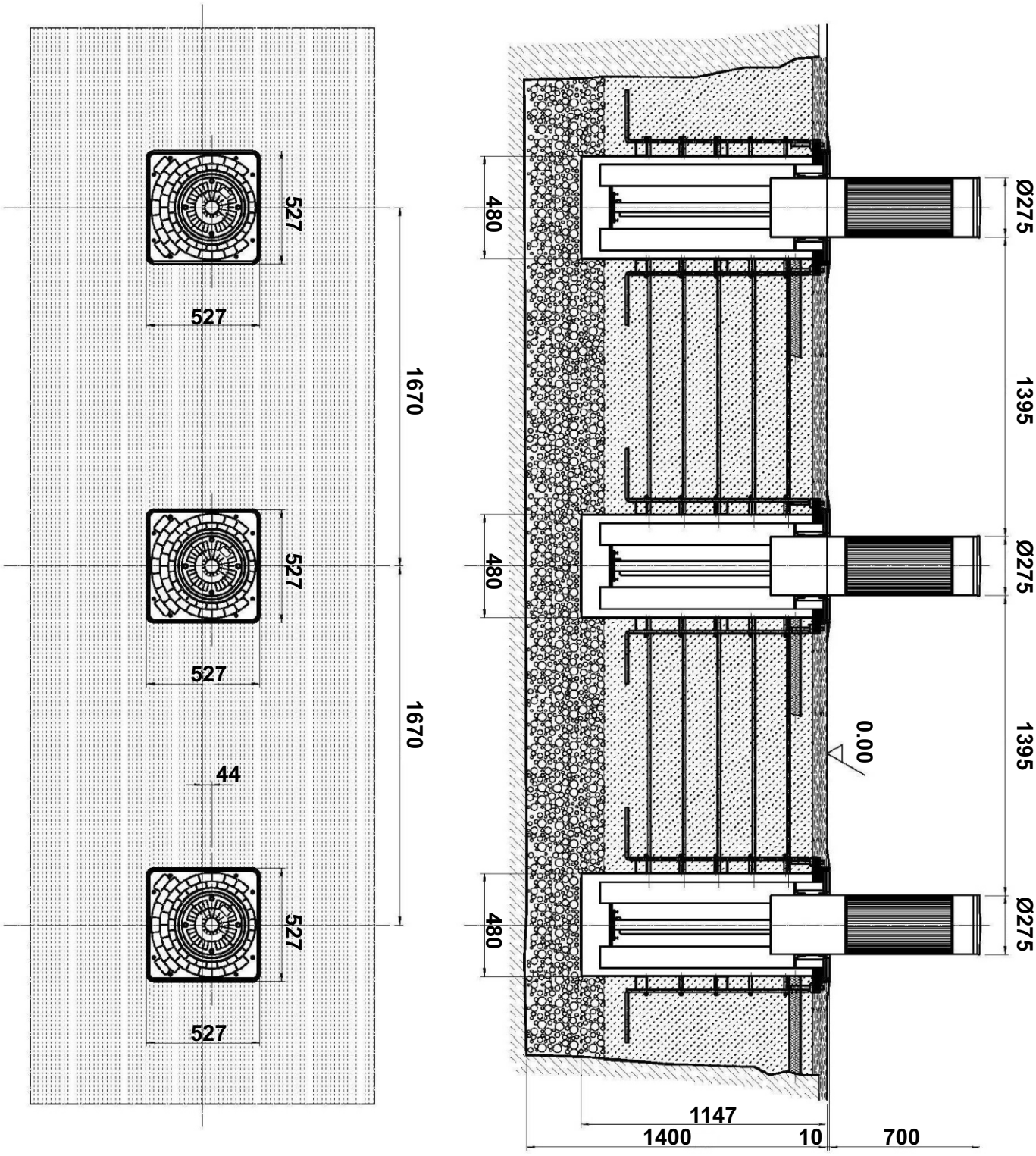


Fig.3

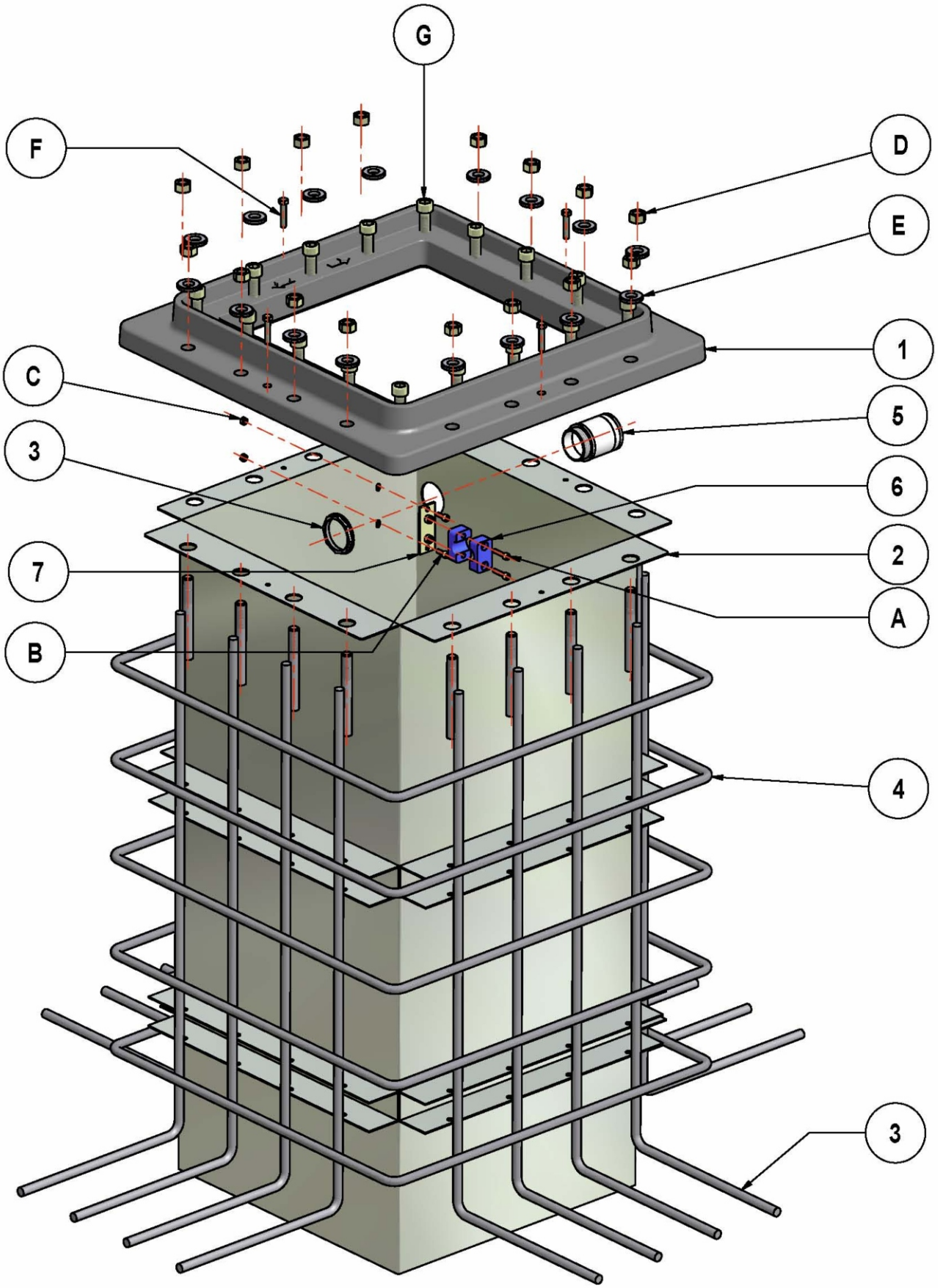


Fig.4

Fig.5

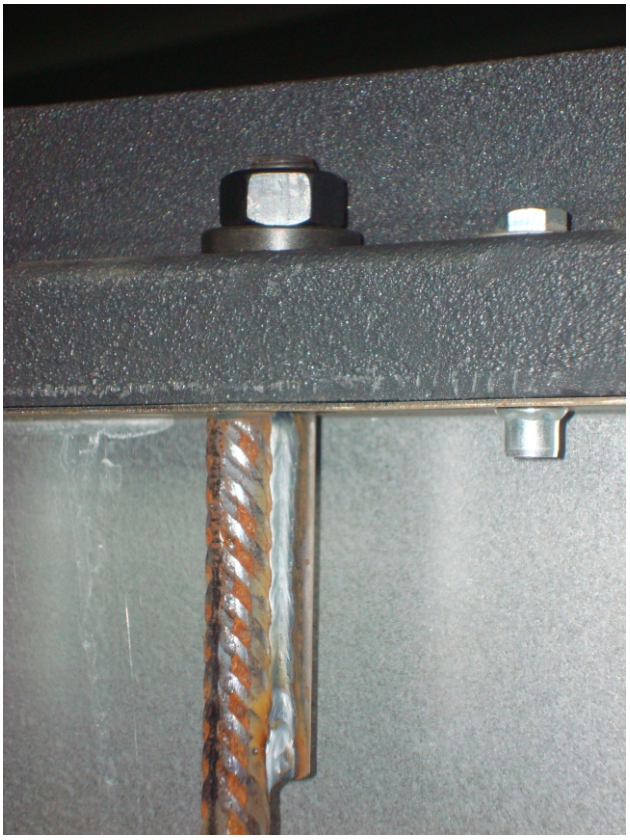


Fig.6

INSTALLATION SCHEME FOR 1 BOLLARD

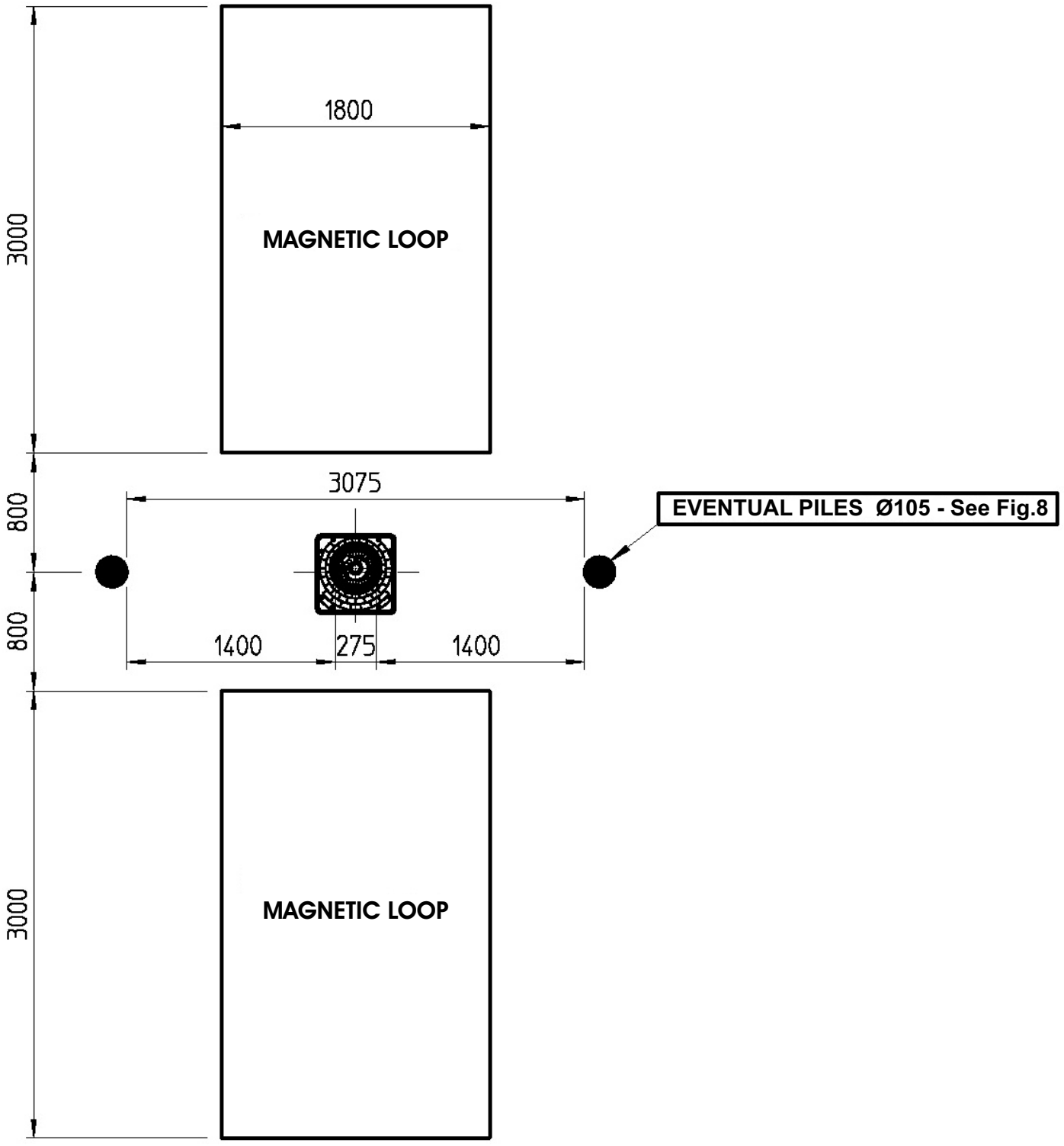


Fig.7

PIPES INSTALLATION SCHEME FOR 1 BOLLARD

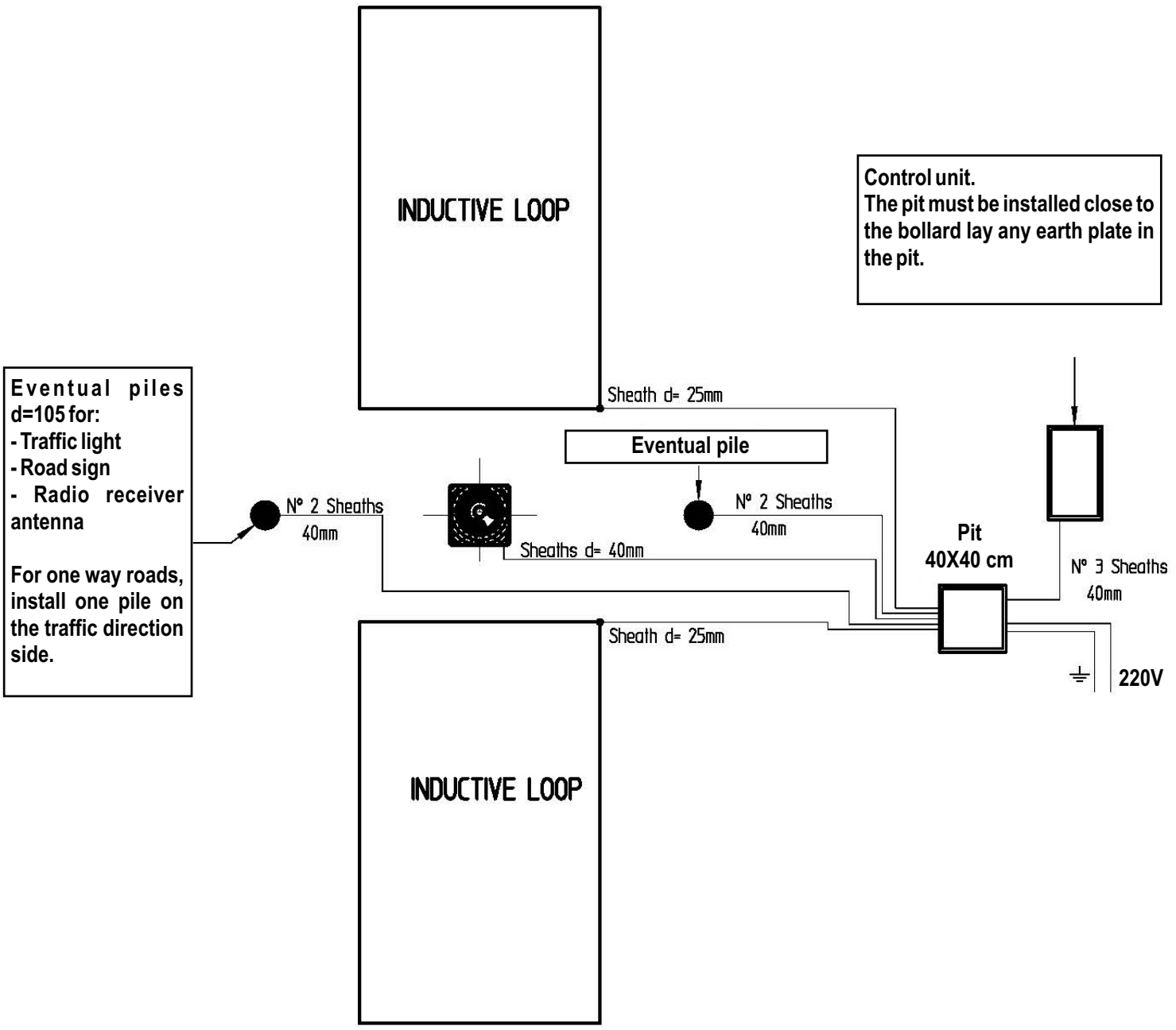


Fig.8

NOTES OF LAYING OF MAGNETIC LOOP

In a system of automatic bollards , has to be installed two inductive safety magnetic loops to detect metal weights (cars), one in front of and another behind the bollard. One standard dimension of these loops is: width 1.80 m - length 3.00 m. Other sizes are available based to the configuration of the system.

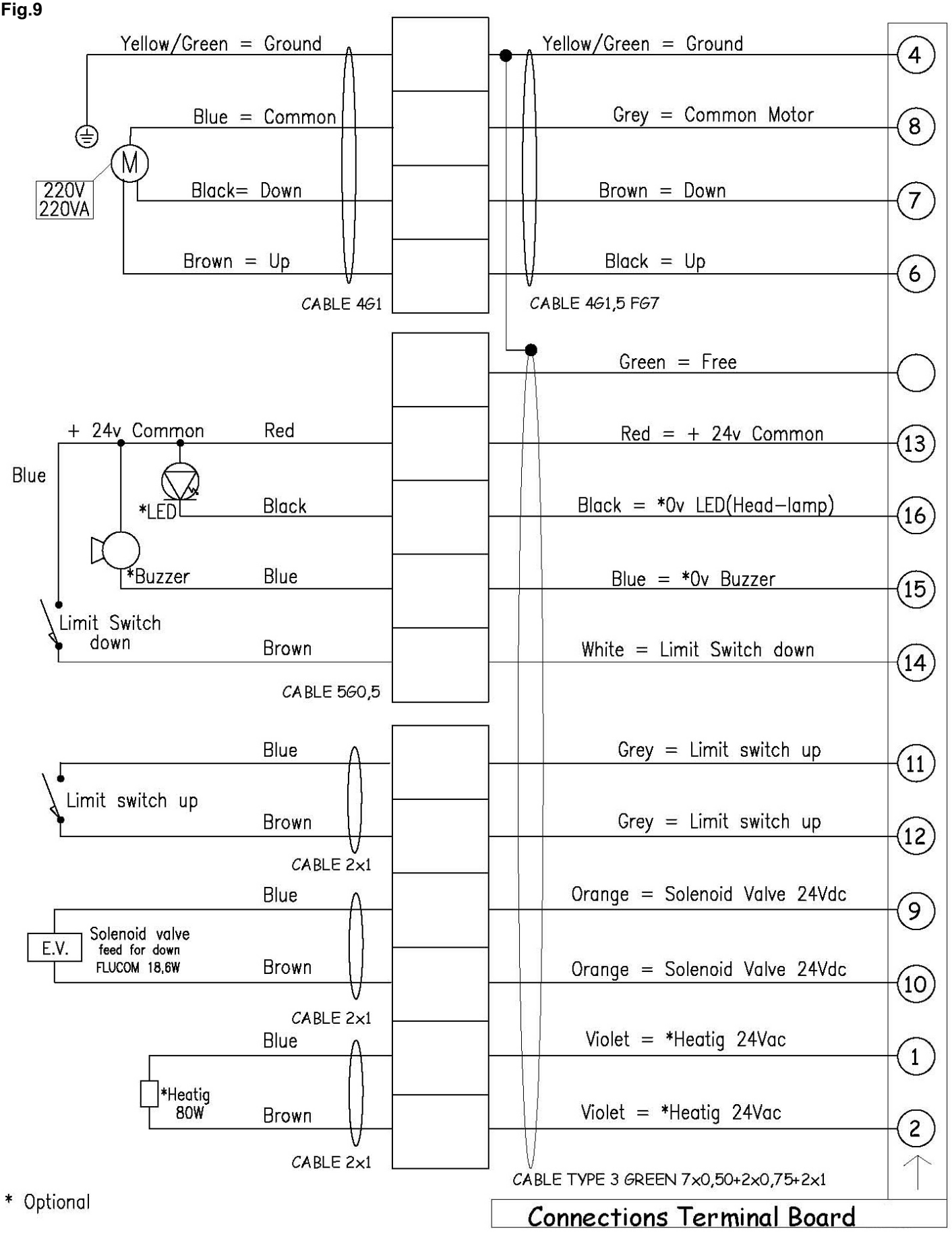
The loop is created by using a special electric cable with a diameter of approximately 9 mm and suitable protection, laid directly in the ground without ant flexible tubes.When laying the loop, it's necessary to check that there are no electrowelded metal meshes nearby. **If this is the case, it's essential that the mesh is at least 25 cm below the loop (otherwise, a 30 cm section of the mesh below the loop must be removed).**

The loop needs to be placed 7 cm below the road surface. If there is any porphyrite or similar, the blocks of porphyrite must be lowered to allow the loop to be laid at this depth. Alternatively, the loop can be laid between one block and another with a fret pattern.

The loop is connected to a line for signal transfer to the movement management station and is made with a special not sensitive cable having a standard length of 15m (in the case of more length communicate this requirement), to be laid in sheath with minimum diameter of 25 mm (the sheath must be laid in full compliance with local regulations).

Note: The inductive loops can also be used to detect an exiting vehicle and perform an "automatic" lowering command.

Fig.9

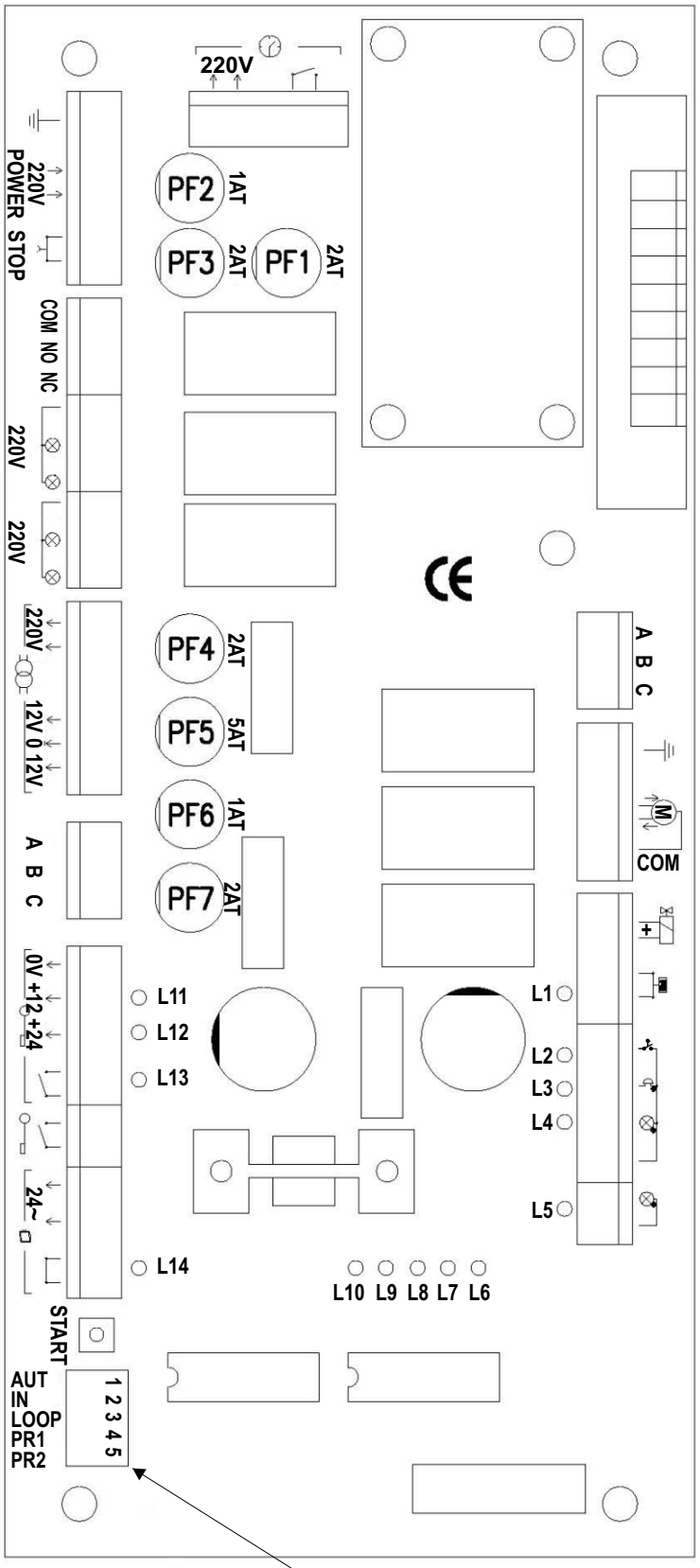


SPECIAL DOUBLE CABLE POWER CONNECTION (GREEN-GREY)

TECHNICAL DATASHEET OF SP CONTROL STATION	
Electronic control circuit	**Micro-processor-operated, with dedicated software that manages the units**
Control station case	**Wall-mounted**
Case size	**See attached table**
Protection class	**IP 55**
Work temperatures	**-15°C + 70°C**
Control station power supply	**230V. + 10% - 50Hz**
Protection cut-off	**Differential thermo magnetic switch 1P + N - 6A ÷ 16A - 6KA**
Service transformer	**24V. Standard power 50 VA**
Maximum number of units to be connected to the control station	**Max. 10 units featuring simultaneous movement - The 1st unit is connected to the master unit - the others are connected to additional slave units -the size of the container is subject to the amount of bollards and accessories required.**

WALL CASE FOR CONTROL STATIONS		
SIZES L x H x P	**Material**	**System configuration**
WALL MOUNTED 320 X 400 X 160	**GW PLAST 120° C**	- For basic system with 1 unit.
WALL MOUNTED 400 X 480 X 160	**GW PLAST 120° C**	- For system with accessories featuring 1 unit. - For basic system with 2 units.
WALL MOUNTED 400 X 600 X 200	**STEEL FE 37**	- For system with accessories featuring 2 units. - For basic system featuring 3 units.
WALL MOUNTED 500 X 700 X 200	**STEEL FE 37**	- For system with accessories featuring 5 units. - For basic system featuring 8 units.
COLOMN 320 X 950 X 280 **Protection class IP 44**	**POLYESTER**	- For system with accessories featuring 2 units. - For basic system featuring 3 units.
AVAILABILITY OF LARGER SIZES BASED ON THE INSTALLATION CONFIGURATION		

LED / DIP SWITCH / PROTECTION



L1 - Input Pressur Sensor
L2 - Input Limit Switch Open
L3 - Out Acustic Bollard
L4 - Out Bollard (mobile)
L5 - Out Bollard (fix)
L6 - Out Close (up)
L7 - Out Solenoid Valve
L8 - Out Open (down)
L9 - Out Running
L10- Out Green Trafic Light
L11- (Out) + 12V d.c. OK
L12- (Out) + 24V d.c. OK
L13- Input Start
L14- Input Detector

PF1- Trasformer Protection
PF2- Clock Protection
PF3- Traffic Lights Protection
PF4- Solenoide Valve Protection
PF5- Aux Protection
PF6- Aux Protection 24V
PF7- Logic Protection

ELECTRONIC CIRCUIT DIP-SWITCH FUNCTIONS

	OFF		ON	
AUTOMATIC	■	1		MANUAL
DRIVES ENABLED	■	2		DRIVES INHIBITED
SAFETY DEVICE ENABLED	■	3		SAFETY DEVICE INHIBITED
LIFTING LIMIT STOP ENABLED	■	4		LIFTING LIMIT STOP INHIBITED
REVERSAL PRESSURE SWITCH ENABLED	■	5		REVERSAL PRESSURE SWITCH INHIBITED

Fig.10

CONTROL UNIT

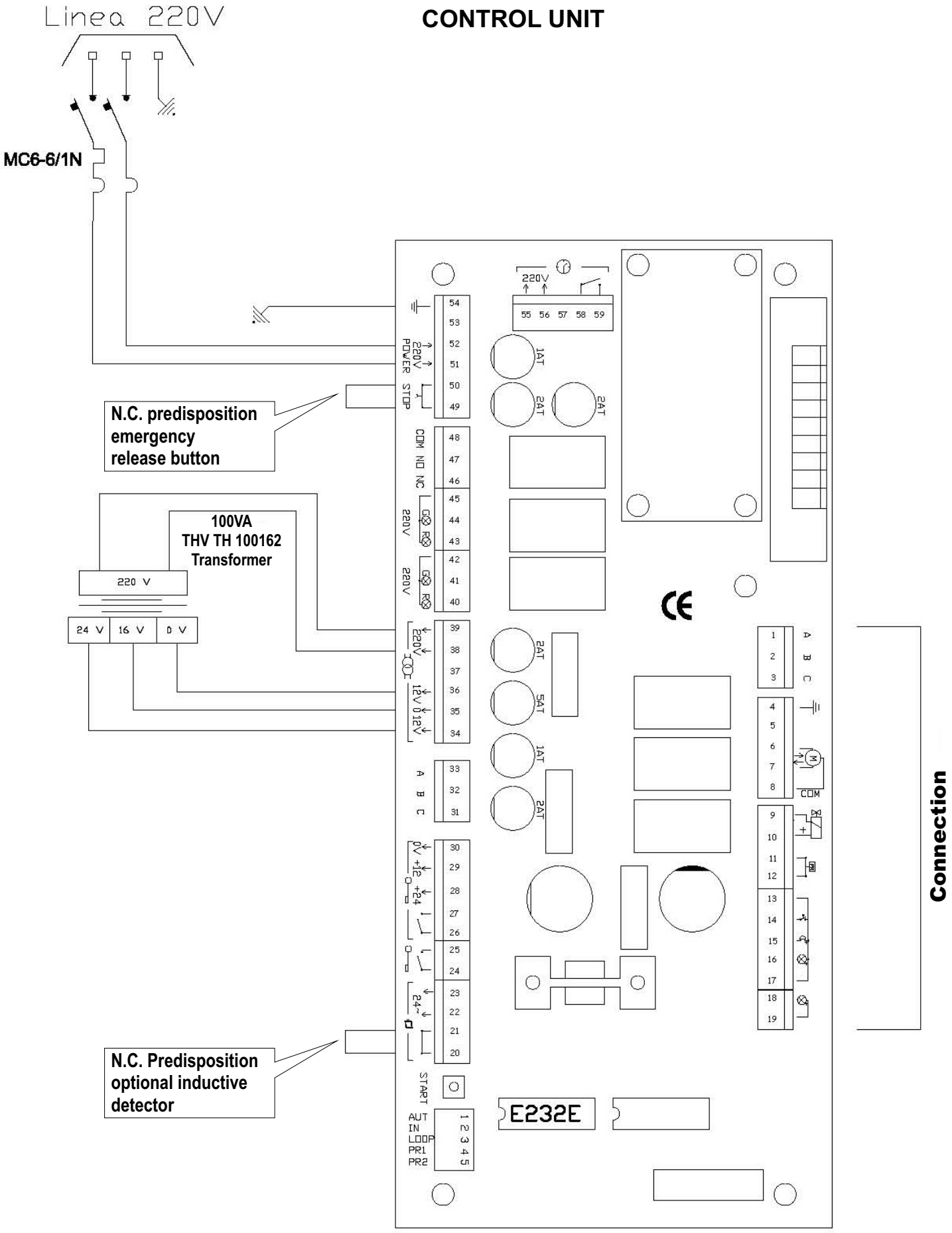


Fig.11

ELECTRONIC CIRCUIT DIPSWITCH FUNCTIONS

FOREWORD: the DIP-SWITCHES that are found on the electronic circuit board are useful to the technicians for a quick diagnostic during maintenance/repair work of the systems.
Indeed, in the event of failures, instead of disconnecting the wires from the terminal strips, it proves to be more functional to cut out a part of the circuits through a proper positioning of the DIP SWITCHES .

DIPSWITCH IN THE OFF POSITION		DIPSWITCH IN THE ON POSITION
AUTOMATIC LIFTING ENABLED	**1**	AUTOMATIC LIFTING INHIBITED
DRIVES ENABLED	**2**	DRIVES INHIBITED
SAFETY DEVICES ENABLED	**3**	SAFETY DEVICES INHIBITED
LIFTING LIMIT STOP ENABLED	**4**	LIFTING LIMIT STOP PRESSURE SWITCH INHIBITED
----------	**5**	**ALWAYS LEAVE ONPOSITION**

DIP SWITCH 1:

Position yet to be defined as a function of the specific need and configuration of the system (if the safety devices are not used, it MUST be positioned on ON)

Off Position = AUTOMATIC LIFT ENABLED: the no-parking column is normally set to be in the high position after the actuation of the drive, it reaches the low position when the vehicle has crossed the controlled passage (hence it engages and then disengages the safety devices), the no-parking column moves the high position if the vehicle does not cross the passage, the no-parking column moves back to the high position automatically after 30”

ON Position = AUTOMATIC LIFT INHIBITED: the no-parking lift, after actuating the drive for the first time, moves from high to low then after a further actuation it moves back to the top position

DIP SWITCH 2:

normally in the OFF position

OFF Position = COMMANDS ENABLED: the bollard moving commands attested to terminals 24/25 26/27 58/59 are operating

ON Position = COMMANDS EXCLUDED: the bollard moving commands attested to terminals 24/25 26/27 58/59 are excluding if the bollard doesn't go up, the Technician can exclude temporally the commands and use the proper button down the circuit to perform testing commands.

DIP SWITCH 3:

normally in the OFF position

OFF Position = SAFETY DEVICES ENABLED: the input for safety devices, attested to terminals 20/21 is operating; if the dip switch is in OFF position without connected device , the bollard will not never go in up position.

ON Position = SAFETY DEVICES EXCLUDED: the input for safety devices, attested to terminals 20/21 is excluded; if the bollard doesn't go up, the Technician can exclude temporally the safety devices to check if the reason of the inefficiency is caused by safety devices.

DIPSWITCH 4:

normally in the OFF position

Position OFF = LIFTING LIMIT STOP-PRESSURE SWITCH ENABLED: at the final lifting stage, the signal emitted by the pressure switch is used as upper limit stop to end the lifting stage.

Position ON = LIFTING LIMIT STOP-PRESSURE SWITCH INHIBITED: The above function is inhibited; the lifting stop occurs by timeout (the timeout delay may change as a function of the installed EPROM memory, on the electronic managing circuit).

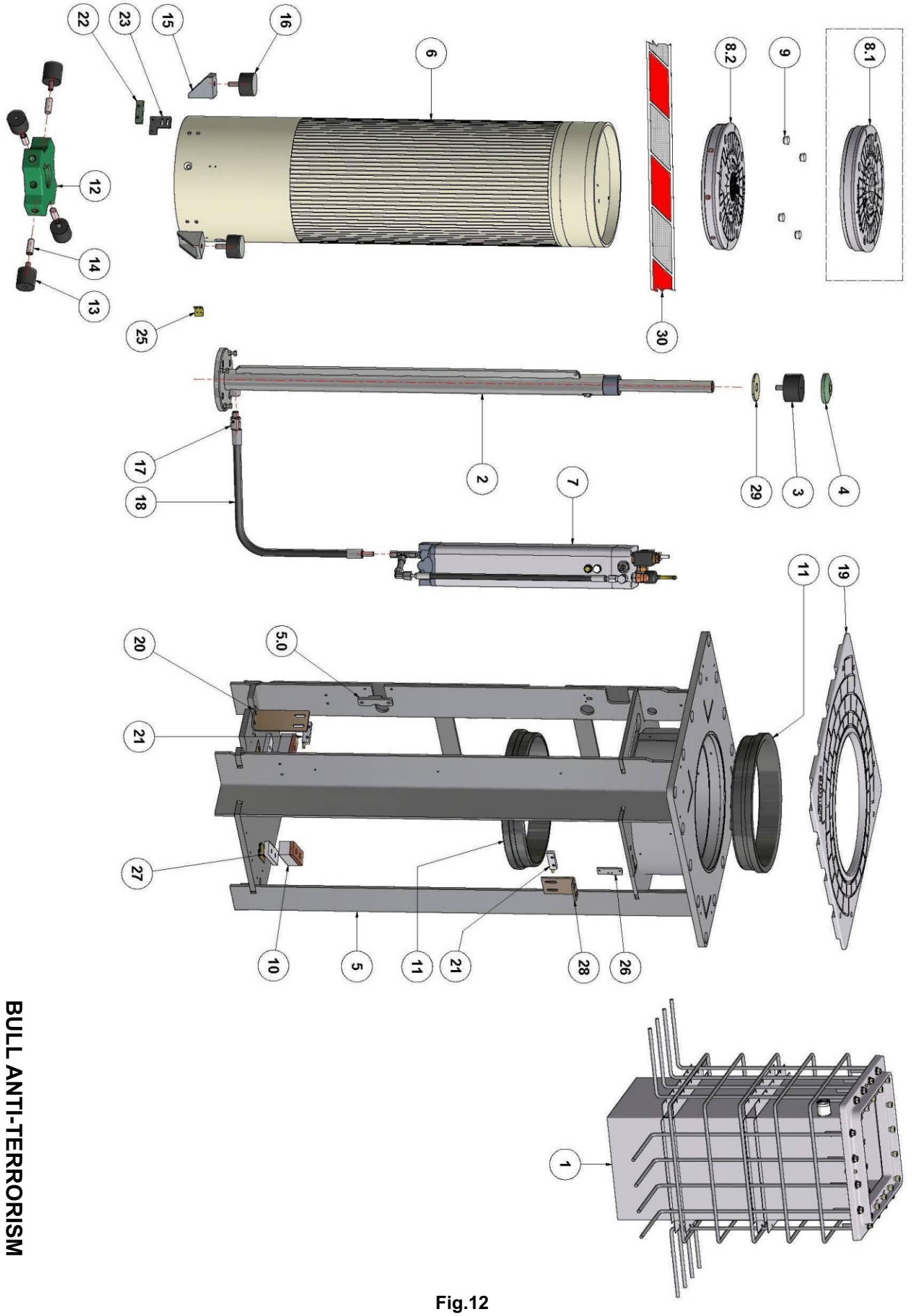
DIP SWITCH 5:

Always leave in ON position

The DIP SWITCH in this configuration (BULL anti-terrorism) is not managed, therefore always leave in ON position.

ELECTRONIC CIRCUIT CONNECTION TERMINAL BOARD

Terminal 1-2-3= available (feedthrough with 31-32-33 with protection fuse)
Terminal 4-5-6-7-8= hydraulic pump connection
Terminal 9-10= automatic lowering connection for lack of 220v
Terminal 11-12= safety pressure switch connection
Terminal 13= common wire for limit switch buzzer flasher
Terminal14= low limit switch connection
Terminal 15= intermittent buzzer connection
Terminal 16= flasher incorporated in the head connection
Terminal 17= common wire for limit switch buzzer flasher
Terminal 18-19= flashing luminous sign connection (24 V. a.c. intermittent output)
Terminal 20-21-22-23= safety magnetic turns inductive detector
Terminal 24-25= input for lowering drive
Terminal 26-27-28-29-30= rx radio / reader for lowering drive connection
Terminal 31-32-33= available (feedthrough with 1-2-3 with protection fuse)
Terminal 34-35-36-37-38-39= service transformer connection
Terminal 40-41-42= connection 220v. Traffic lights 1
Terminal 43-44-45= connection 220v. traffic lights 2
Terminal 46-47-48= remote repetition of traffic lights (neutral switching contact) -
Terminal 49-50= glass broken emergency pushbutton
Terminal 51-52= 220v. connection to electronic circuit
Terminal 53= not used
Terminal 54= ground connection
Terminal 55-56-57-58-59= weekly/yearly clock connection



BULL ANTI-TERRORISM

Fig.12

ORDINARY ROUTINE MAINTENANCE PROCEDURE:

The standard routine maintenance sequence is as follows:

- Cleaning of pit with suction of all material settlements
- Cleaning of the holes for the water drainage located on the pit bottom -
- Cleaning and greasing of the central sliding rail
- Testing (and replacement, if needed) of the lower beat gaskets
- Testing and repair (if required) of the handling piston for oil leaks
- General testing of the pop-up element's screws for correct tightening
- General cleaning of the moving cylinder and painting touch-ups, if needed -
- Testing of the hydraulic pump, top-up of oil level and checks over working pressure settings
- Testing the main differential magnetothermal switch with a loop tester, checking isolation and continuity.
- Testing the value (earth resistance) and earth continuity with loop tester.

MOREOVER, IF THE FOLLOWING ITEMS ARE IN THE SYSTEM, PERFORM THE FOLLOWING CHECKS AND TESTS:

Test the flashing light that is incorporated in the element's head for proper operation

- Operating test of traffic-lights lanterns
- Operating test of inductive safety loops
- Verification of correct operation of the electricity lack procedure
- Operating test over the control radio receiver
- Operating test of the emergency lowering sound analyser
- Operating test of the remote control GSM effector
- Sight check of the electronic handling management unit (e.g. : “flooded” relay contacts oxidized clamps etc.)

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Italiano **AVVERTENZE GENERALI PER INSTALLATORE E UTENTE**

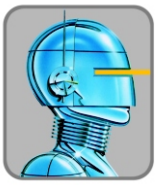
1. Leggere attentamente le **Istruzioni di Montaggio** e le **Avvertenze Generali** prima di iniziare l'installazione del prodotto. Conservare la documentazione per consultazioni future
2. Non disperdere nell' ambiente i materiali di imballaggio del prodotto e/o circuiti
3. Questo prodotto è stato progettato e costruito esclusivamente per l'utilizzo indicato in questa documentazione. Qualsiasi altro utilizzo non espressamente indicato potrebbe pregiudicare l'integrità del prodotto e/o rappresentare fonte di pericolo. L'uso improprio è anche causa di cessazione della garanzia. La SEA S.p.A. declina qualsiasi responsabilità derivata dall'uso improprio o diverso da quello per cui l'automatismo è destinato.
4. I prodotti SEA sono conformi alle Direttive: Macchine (2006/42/CE e successive modifiche), Bassa Tensione (2006/95/CE e successive modifiche), Compatibilità Elettromagnetica (2004/108/CE e successive modifiche). L'installazione deve essere effettuata nell'osservanza delle norme EN 12453 e EN 12445.
5. Non installare l'apparecchio in atmosfera esplosiva.
6. SEA S.p.A. non è responsabile dell'inosservanza della Buona Tecnica nella costruzione delle chiusure da motorizzare, nonché delle deformazioni che dovessero verificarsi durante l' uso.
7. Prima di effettuare qualsiasi intervento sull'impianto, togliere l'alimentazione elettrica e scollegare le batterie. Verificare che l'impianto di terra sia realizzato a regola d'arte e collegarvi le parti metalliche della chiusura.
8. Per ogni impianto SEA S.p.A. consiglia l'utilizzo di almeno una segnalazione luminosa nonché di un cartello di segnalazione fissato adeguatamente sulla struttura dell'infisso.
9. SEA S.p.A. declina ogni responsabilità ai fini della sicurezza e del buon funzionamento della automazione, in caso vengano utilizzati componenti di altri produttori.
10. Per la manutenzione utilizzare esclusivamente parti originali SEA.
11. Non eseguire alcuna modifica sui componenti dell'automazione.
12. L'installatore deve fornire tutte le informazioni relative al funzionamento manuale del sistema in caso di emergenza e consegnare all'Utente utilizzatore dell'impianto il libretto d'avvertenze allegato al prodotto.
13. Non permettere ai bambini o persone di sostare nelle vicinanze del prodotto durante il funzionamento. L'applicazione non può essere utilizzata da bambini, da persone con ridotte capacità fisiche, mentali, sensoriali o da persone prive di esperienza o del necessario addestramento. Tenere inoltre fuori dalla portata dei bambini radiocomandi o qualsiasi altro datore di impulso, per evitare che l'automazione possa essere azionata involontariamente.
14. Il transito tra le ante deve avvenire solo a cancello completamente aperto.
15. Tutti gli interventi di manutenzione, riparazione o verifiche periodiche devono essere eseguiti da personale professionalmente qualificato. L'utente deve astenersi da qualsiasi tentativo di riparazione o d'intervento e deve rivolgersi esclusivamente a personale qualificato SEA. L'utente può eseguire solo la manovra manuale.
16. La lunghezza massima dei cavi di alimentazione fra centrale e motori non deve essere superiore a 10 m. Utilizzare cavi con sezione 2.5 mm^2. Utilizzare cablaggi con cavi in doppio isolamento (cavi con guaina) nelle immediate vicinanze dei morsetti specie per il cavo di alimentazione (230V). Inoltre è necessario mantenere adeguatamente lontani (almeno 2.5 mm in aria) i conduttori in bassa tensione (230V) dai conduttori in bassissima tensione di sicurezza (SELV) oppure utilizzare un'adeguata guaina che fornisca un isolamento supplementare avente uno spessore di almeno 1 mm.

English **GENERAL NOTICE FOR THE INSTALLER AND THE USER**

1. Read carefully these **Instructions** before beginning to install the product. Store these instructions for future reference
2. Don't waste product packaging materials and /or circuits.
3. This product was designed and built strictly for the use indicated in this documentation. Any other use, not expressly indicated here, could compromise the good condition/operation of the product and/or be a source of danger. SEA S.p.A. declines all liability caused by improper use or different use in respect to the intended one.
4. The mechanical parts must be comply with Directives: Machine Regulation 2006/42/CE and following adjustments), Low Tension (2006/95/CE), electromgnetic Consistency (2004/108/CE) Installation must be done respecting Directives: EN12453 and En12445.
5. Do not install the equipment in an explosive atmosphere.
6. SEA S.p.A. is not responsible for failure to observe Good Techniques in the construction of the locking elements to motorize, or for any deformation that may occur during use.
7. Before attempting any job on the system, cut out electrical power and disconnect the batteries. Be sure that the earthing system is perfectly constructed, and connect it metal parts of the lock.
8. Use of the indicator-light is recommended for every system, as well as a warning sign well-fixed to the frame structure.
9. SEA S.p.A. declines all liability as concerns the automated system's security and efficiency, if components used, are not produced by SEA S.p.A..
10. For maintenance, strictly use original parts by SEA.
11. Do not modify in any way the components of the automated system.
12. The installer shall supply all information concerning system's manual functioning in case of emergency, and shall hand over to the user the warnings handbook supplied with the product.
13. Do not allow children or adults to stay near the product while it is operating. The application cannot be used by children, by people with reduced physical, mental or sensorial capacity, or by people without experience or necessary training. Keep remote controls or other pulse generators away from children, to prevent involuntary activation of the system.
14. Transit through the leaves is allowed only when the gate is fully open.
15. The User must not attempt to repair or to take direct action on the system and must solely contact qualified SEA personnel or SEA service centers. User can apply only the manual function of emergency.
16. The power cables maximum length between the central engine and motors should not be greater than 10 m. Use cables with 2,5 mm^2 section. Use double insulation cable (cable sheath) to the immediate vicinity of the terminals, in particular for the 230V cable. Keep an adequate distance (at least 2.5 mm in air), between the conductors in low voltage (230V) and the conductors in low voltage safety (SELV) or use an appropriate sheath that provides extra insulation having a thickness of 1 mm.

TERMS OF SALES

EFFICACY OF THE FOLLOWING TERMS OF SALE: the following general terms of sale shall be applied to all orders sent to SEA S.p.A. All sales made by SEA to all costumers are made under the prescription of this terms of sales which are integral part of sale contract and cancel and substitute all apposed clauses or specific negotiations present in order document received from the buyer.
GENERAL NOTICE The systems must be assembled exclusively with SEA components, unless specific agreements apply. Non-compliance with the applicable safety standards (European Standards EM12453 – EM 12445) and with good installation practice releases SEA from any responsibilities. SEA shall not be held responsible for any failure to execute a correct and safe installation under the above mentioned standards.
1) PROPOSED ORDER The proposed order shall be accepted only prior SEA approval of it. By signing the proposed order, the Buyer shall be bound to enter a purchase agreement, according to the specifications stated in the proposed order.
On the other hand, failure to notify the Buyer of said approval must not be construed as automatic acceptance on the part of SEA.
2) PERIOD OF THE OFFER The offer proposed by SEA or by its branch sales department shall be valid for 30 solar days, unless otherwise notified.
3) PRICING The prices in the proposed order are quoted from the Price List which is valid on the date the order was issued. The discounts granted by the branch sales department of SEA shall apply only prior to acceptance on the part of SEA. The prices are for merchandise delivered ex-works from the SEA establishment in Teramo, not including VAT and special packaging. SEA reserves the right to change at any time this price list, providing timely notice to the sales network. The special sales conditions with extra discount on quantity basis (Qx, Qx1, Qx2, Qx3 formula) is reserved to official distributors under SEA management written agreement.
4) PAYMENTS The accepted forms of payment are each time notified or approved by SEA. The interest rate on delay in payment shall be 1.5% every month but anyway shall not be higher than the max. interest rate legally permitted.
5) DELIVERY Delivery shall take place, approximately and not peremptorily, within 30 working days from the date of receipt of the order, unless otherwise notified. Transport of the goods sold shall be at Buyer's cost and risk. SEA shall not bear the costs of delivery giving the goods to the carrier, as chosen either by SEA or by the Buyer. Any loss and/or damage of the goods during transport, are at Buyer's cost.
6) COMPLAINTS Any complaints and/or claims shall be sent to SEA within 8 solar days from receipt of the goods, proved by adequate supporting documents as to their truthfulness.
7) SUPPLY The concerning order will be accepted by SEA without any engagement and subordinately to the possibility to get it's supplies of raw material which is necessary for the production; Eventual completely or partially unsuccessful executions cannot be reason for complains or reservations for damage. SEA supply is strictly limited to the goods of its manufacturing, not including assembly, installation and testing. SEA, therefore, disclaims any responsibility for damage deriving, also to third parties, from non-compliance of safety standards and good practice during installation and use of the purchased products.
8) WARRANTY The standard warranty period is 12 months. This warranty time can be extended by means of expedition of the warranty coupon as follows:
SILVER: The mechanical components of the operators belonging to this line are guaranteed for 24 months from the date of manufacturing written on the operator.
GOLD: The mechanical components of the operators belonging to this line are guaranteed for 36 months from the date of manufacturing written on the operator.
PLATINUM: The mechanical components of the operators belonging to this line are guaranteed for 36 months from the date of manufacturing written on the operator. The base warranty (36 months) will be extended for further 24 months (up to a total of 60 months) when it is acquired the certificate of warranty which will be filled in and sent to SEA S.p.A. The electronic devices and the systems of command are guaranteed for 24 months from the date of manufacturing. In case of defective product, SEA undertakes to replace free of charge or to repair the goods provided that they are returned to SEA repair centre. The definition of warranty status is by unquestionable assessment of SEA. The replaced parts shall remain propriety of SEA. Binding upon the parties, the material held in warranty by the Buyer, must be sent back to SEA repair centre with fees prepaid, and shall be dispatched by SEA with carriage forward. The warranty shall not cover any required labour activities.
The recognized defects, whatever their nature, shall not produce any responsibility and/or damage claim on the part of the Buyer against SEA. The guarantee is in no case recognized if changes are made to the goods, or in the case of improper use, or in the case of tampering or improper assembly. Furthermore, the warranty shall not apply if SEA products are partly or completely coupled with non-original mechanical and/or electronic components, and in particular, without a specific relevant authorization, and if the Buyer is not making regular payments. The warranty shall not cover damage caused by transport, expendable material, faults due to non-conformity with performance specifications of the products shown in the price list. No indemnification is granted during repairing and/or replacing of the goods in warranty. SEA disclaims any responsibility for damage to objects and persons deriving from non-compliance with safety standards, installation instructions or use of sold goods.
9) RESERVED DOMAIN A clause of reserved domain applies to the sold goods; SEA shall decide autonomously whether to make use of it or not, whereby the Buyer purchases propriety of the goods only after full payment of the latter.
10) COMPETENT COURT OF LAW In case of disputes arising from the application of the agreement, the competent court of law is the tribunal of Teramo. SEA reserves the faculty to make technical changes to improve its own products, which are not in this price list at any moment and without notice. SEA declines any responsibility due to possible mistakes contained inside the present price list caused by printing and/or copying. The present price list cancels and substitutes the previous ones. The Buyer, according to the law No. 196/2003 (privacy code) consents to put his personal data, deriving from the present contract, in SEA archives and electronic files, and he also gives his consent to their treatment for commercial and administrative purposes. Industrial ownership rights: once the Buyer has recognized that SEA has the exclusive legal ownership of the registered SEA brand, he will commit himself to use it in a way which does not reduce the value of these rights, he won't also remove, replace or modify brands or any other particularity from the products. Any kind of replication or use of SEA brand is forbidden as well as of any particularity on the products, unless preventive and expressed authorization by SEA.
In accomplishment with art. 1341 of the Italian Civil Law it will be approved expressively clauses under numbers:
4) PAYMENTS - 8) GUARANTEE - 10) COMPETENT COURT OF LOW



SEA®

electronic opening system

Questo articolo è stato prodotto seguendo rigide procedure di lavorazione ed è stato testato singolarmente al fine di garantire i più alti livelli qualitativi e la vostra soddisfazione.
Vi ringraziamo per aver scelto SEA.

This item has been produced following strict production procedures and has been singularly tested for the highest quality levels and for your complete satisfaction.
Thanks for choosing SEA.

Cet article a été produit suivant des procédures d'usinage strictes et il a singulièrement été testé afin de garantir les plus hauts niveaux de qualité pour votre satisfaction.
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Este articulo ha sido producido siguiendo rigidos procedimientos de elaboracion y ha sido probando singolarmente a fin de garantizar los mas altos inveles de calidad y vuestra satisfaccion.
Le agradecemos por haber escogito SEA.

CERTIFICATO DI ESTENSIONE GARANZIA
CERTIFICATE OF WARRANTY EXTENTION

n.

PRODOTTO/ PRODUCT

- Modello/*Model*_____
- Matricola n. /*Serial Number*_____
- Data di acquisto/*Date of order*_____
- Data di installazione/*Date of installation*_____

Centrale/Control unit	**SEA** ☐	**Altri/*Others*** ☐
Fotocellule/Photocells	**SEA** ☐	**Altri/*Others*** ☐
RX - TX	**SEA** ☐	**Altri/*Others*** ☐
Altri accessori /Other accessories	**SEA** ☐	**Altri/*Others*** ☐

UTENTE/Customer

Nome e Cognome_____

First Name and Family Name _____

Indirizzo/Address_____

_____

INSTALLATORE/Installer

Ragione sociale/*Company Name* _____

Nome e Cognome/*First and Family Name*_____

Indirizzo/*Address* _____

INSTALLATORE/INSTALLER

Firma per il trattamento dei dati personali 196/2003
Agreement of law No. 196/2003 (Privacy Code)

Copia da restituire
Copy to be returned

Firma e Timbro
Sign and Stamp _____

N.B: L'estensione della garanzia legale di 12 mesi a 24 mesi e 36 mesi è valida solo se il presente modulo viene rispedito per posta o fax a SEA S.p.A. entro 15gg dalla data di acquisto. Allegare relativa fattura d'acquisto.

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Note: The extension of the legal standard warranty of 12 months to 24 months and to 36 months, is valid only if the present form is returned by mail or fax to SEA S.p.A within 15days from the date of purchase. Attach customer invoice.

SEA®
Sistemi Elettronici
di Apertura Porte e Cancelli
International registered trademark n. 804888

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